TV Signal Level Meter

Operator's Manual

ZMCP 1.1AD

Please read this manual carefully prior to using this product.

The technical specifications and operating methods included in this manual are subject to changes without notice. In case of any inquires after a period of usage, please consult the distributor or manufacturer.

Make certain that the battery is fully charged before the first using of the meter.

Warning: The meter is powered with high-performance Li-ion battery. Use only the charger provided by the manufacturer. Using any other battery charger may overheat or distort the meter, or cause fire, injury or harm to the environment and will void the warranty parts not meeting the product's specifications, misuse other software application, damage due to shipment, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, removal, installation and set-up service charges by any third party, and failure to follow instructions supplied with the product.

Overview

It is an economical ideal instrument for the basic HFC network. It is rugged, very simple and efficient to use, has a durable plastic shell and protective rubber jacket, and is convenient for one hand operation.

Quick Guide

Charge the meter

Attach the connectors between the charger and the AC current. While the meter is charging, the charger indicator light is red. There is also an indicator on the power adaptor. On completion of charge, the indicator light on the power adaptor will turn green.

Press and hold , the unit will power on after a beep, enter main menu. Main menu includes short cut to below menus: LEVEL, AUTO, TILT, VOLTAGE, C/N, SETUP.

SETUP

In the main menu, press 6/PQR, to enter setup menu. Using UP, DOWN, LEFT, RIGHT select item and press F3 to enter, change parameters and press F3 to save

Setup items and parameters include:

SHUTDOWN TIME

1 to 99MIN, ALWAYS ON

LEVEL UNIT

dBuV dBmV

LANGUAGE

Chinese, English, etc.

CHANNEL PLAN

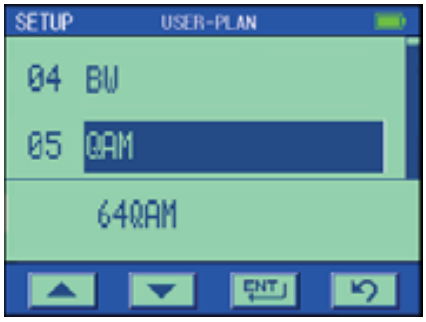
Up to 8 channel plans can be preset, select your desired channel plan.

EDIT PLAN

Using arrow button select a channel, press F3 to edit.

You can set the parameters of all channels of selected channel plan.

The items include: availability, channel type. If the channel type is analog channel, you can set video carrier frequency, AIF. If the channel type is digital channel, you can set center frequency, bandwidth, modulation type, symbol rate. Press F3 to save the settings.



Bandwidth: 1.0MHz – 9.0MHz

Modulation type: 16/32/64/128/256QAM

Symbol rate: 1.0MS/s – 9.0MS/s

COLOR

Select your favorite style of menus, includes below colors:

Green/white; white/black; blue/yellow

INIT ALL

This allow you to initialize your unit to factory default, all your settings will be lost after initializing. Using F1 , F2 select an action and press F3 to confirm.

HARDWARE VER

Showing the hardware version of the unit

SOFTWARE VER

Showing the software version of the unit

SERIAL NUMBER

Showing the serial number of the unit

START TO USE

Digital channel signal measurement

In the main menu, select the LEVEL icon and press ENT MENU to enter channel measurement mode. The same way you can select other icons or directly press other numbers to enter other measurement modes.

In digital channel measurement mode, there is "CHD" symbol before the channel number. The screen will show frequency and average channel power. If the channel is analog it will show "CHV" before the channel number, press 0 DIGT to shift to digital channel.

F1: Enter QAM analysis menu.
F4: Enter next screen of this measurement mode

In any modes, you can press ENT MENU to go back to main menu.

In digital channel measurement mode, press F4, enter below menu.

F1: The previous menu.
F2: Setup parameters of current channel.
F3: Enter single frequency measurement mode.
F4: Enter "Next screen".

MER, BER Analysis

In digital channel measurement mode, press F1 to enter QAM analysis mode.

F1 Refresh

F3 Setup of channel parameters

Analog channel measurement mode

Like entering digital channel measurement mode, the same way you can enter analog channel, or press

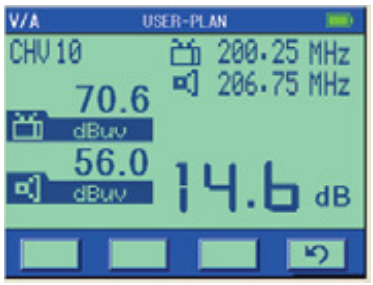
to toggle to analog channel from digital channel.

F1 Enter V/A measurement menu

F4 Enter “Next screen”

V/A measurement

In analog channel measurement mode, Press F1 to enter V/A measurement menu. The screen will show the video carrier signal level, audio carrier signal level, and the video to audio ration.



Audio measurement

On “Next screen” of analog channel measurement mode, press F3 to enter audio measurement.

Using F1 adjust the volume, using F2, F3 turn up, turn down the channel. Press F4 to go back to the video carrier measurement mode.

Single Frequency Measurement

In analog channel measurement mode, using numeric key input the frequency

number, next you will see 4 soft keys on the bottom of the screen, then use F1 as backspace, use F2 to insert a dot, press F3 to enter single frequency measurement.

Using F1 or F2 tune up or tune down the frequency at 50Hz step, using F3 adjust, the volume. Press F4 to go to next screen.

AUTO

In the Auto measurement mode, press F1 to refresh the test result. Press F3 to enter the setup menu.

Using F1, F2 select a channel, Using F3 select or deselect it, finally press F4 to save

TILT

In the TILT measurement mode, using F1 or F2 select a channel. The channel number, channel type, and signal level will show in the right of the screen, as well as Max signal level, Min signal level, the difference between the Max and the Min.

Press F3to enter the TILT channel setup menu. Using F3 select or deselect a channel. Press F4 to save and exit.

TRUNK

In TRUNK voltage measurement mode, the unit automatically identifies AC or DC and show test results on the screen. Internal battery voltage can also be showed.

C/N

In this mode, the input signal level must be over 70dBuV and available for analog channel only. Using F1 refresh the result. Using F2 or F3 change channel. Directly input channel number and press F4 to enter desired channel.

PC communication

Power on, press

as soon as you see the main menu. The unit will enter PC ommunication mode and show a PC symbol on the screen.

Specification

Frenquency	
Rage	47MHz-870MHz
Accuary	± 50 ppm (20°C ± 5°C)
Channel Type	
Analog TV	TV
Digital TV	QSPSK<QAM(16/32/64/128/256QAM)COFDM
FM Channel	Single Frequency
Level Measurement	
Rage	30dBuV - 120dBuV
Accuary	±2dB (10°C to 30°C)
Resolution	0.1dB
Trunk Voltage measurement	
Imput range	0-100VAC
Accuracy	± 1.5V Resolution 0.1V
Autio Output*	Built-in speaker
Dimension	85mm X 160mm x 40mm (with jacket)
Gross Weight	0.9kg
Net Weight	0.45kg (with jacket)
Display	320 x 240 Color LCD with backlight
Power Supply	
Charger	AC 100V-240V/50Hz
Battery	11.1V 1250mAH LI-Ion
Working Time	>8 hours (Full charged battery)
Chargin Time	4-6 hrs.